MEETING MINUTES

MEETING: Public Information Session

LOCATION: Guilford College

DATE: December 11, 2000
6:30 PM – 7:30 PM

SUBJECT: **Stream Identification and Mapping for Water-Supply Watershed Protection**

PRESENTED: City of Greensboro, Water Resources Department, Stormwater Management Division;
Law Engineering and Environmental Services, Inc.

AGENDA: 6:30 - 6:35 Welcome (Jeremy Thomas)
6:35 - 6:40 Project Introduction/History (Jeremy Thomas)
6:40 - 7:00 Project Details/Status (Richard Darling)
7:00 - 7:30 Questions & Comments

Project History
- Existing State Approved Map
- Limitations
- No Reliable Map Source
- Accurate Map vs. Site -Specific Determinations

Project Purpose
- Proactive - Meeting Water-Supply Watershed Stream Buffer Requirements
- Accurate Map - "scientifically defensible methodology"
- Comprehensive Map - Minimize need for site specific determinations

Existing Stream Buffer Requirements
- Existing Water-Supply Watershed Protection
- Randleman Lake Buffer Protection
- Future Cape Fear Basin Riparian Buffer Rule

Project Team
- City of Greensboro
- Stormwater Management Division
- Law Engineering & Environmental Svcs.
- Primary Consultant
- Water Resource Research Institute
- Dr. James Gregory, NCSU Forestry
- NC Division of Water Quality

Stakeholders

Regulators, Municipal Interests, Development Community, Environmental Interests

LAW Engineering and Environmental Services, Inc.
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Project Objective

Accurate Field Identification of Perennial and Intermittent Stream Breakpoints
GIS Layer

Project Milestones

Project Commenced June 2000 (Pilot Workbasin Field Application)
Intermittent Methodology Approval August 2000
Perennial Methodology Approval November 2000
Full Field Mobilization December 2000
Final Maps Anticipated June 2001

Project Area

Field Identification - What is a Stream?
Project Methodology
Comprehensive Workplan
Detail Field Procedures
GIS Database Design
QA/QC Plan
Test Area - Evaluate Appropriateness of Field Methodology
SubBasin Stormwater Approach
Integrate project with City Stormwater Conveyance System Inventory Project
Stormwater Inventory

Methodology

LAWGIBB obtained regulatory approval of the required scope by applying a project-tested methodology, including the following tasks:
Stream Field Classification
A two-phased approach identifying the approximate location of the beginning of intermittent channels and the beginning of perennial channels (equivalent to the termination of intermittent channel status) is being employed.
The four-tiered weighted scale is designed to encompass the range in variability of each character likely to be observed in the field.
Observations of primary and secondary geomorphologic, hydrologic, and biological indicators are being recorded on the DWQ Stream Classification Form.

GPS

The Global Positioning System (GPS) is a worldwide radio-navigation system formed from a constellation of 24 (NAVSTAR) satellites and their ground stations operated by the U.S. Department of Defense.
The 24 operational NAVSTAR satellites orbiting the earth every 12 hours provide worldwide, all-weather, 24 hour time and position information.

Deliverables

GIS Map
Reports

Project Benefits to the Public

Accurate Map
Water-Supply Protection
Wildlife Corridors/Aquatic Habitat
Green Space/Recreation
Educational Resource

Project Benefits to Developers/Businesses

Advance knowledge of undevelopable areas
Cost and Time Savings in Site Assessments
Available Electronically via Internet
Quick Reference Tool
Streamlines Regulatory Review.

Project Benefits to Regulators/State/Government

Method for identifying perennial vs. intermittent streams
Applications to other Piedmont watersheds
Applications (with modifications) to other NC watersheds and other states
Enhancement for Cape Fear River Basin
Data for Future Research
Stream Baseline Data
City Compliance with State Regulations (existing & anticipated)
Water Supply Protection

COMMENTS / QUESTIONS

- It was noted that stream buffers will be applied from the top of the bank on either side.
- Best Management Practices (BMPs) can and will be required in conjunction with buffer requirements. Specifics will vary from site to site.
- "Will there be testing of soil porosity?" The testing of soils is not within the scope of this project and the State does not currently require it.
- The 100' buffer is applicable when the impervious fraction of a proposed development imperviousness exceeds 24%; < 24% only requires a 30' buffer.
- It was noted that the graded slope at the Cotswold/Battleground intersection appears to be very steep and subject to erosional problems. The stream identification methodology does not factor in the steepness of surrounding slopes.
- Mapping will not be conducted outside of the City limits for this project. However, annexation areas may be mapped in the future.
- It was noted that potential negative/harmful water-supply intrusion may originate outside the city limits.

- Field teams will alert the City to unusual and/or potentially hazardous conditions observed in the field.

- Guilford County is aware of and involved with the project (stakeholder).

- The City's stormwater fee is funding the project.

- Reports are not being filed with EPA. However, EPA was contacted early in the project for assistance/information and is very interested in the results. This project may become a model for similar projects not only in NC, but throughout the U.S.

- The project will not report on the presence of endangered species. This is the responsibility of other agencies (e.g. U.S. Fish and Wildlife Service).

- The maps will include several data layers in addition to streams (e.g. aerial coverage, roads, stormwater conveyance, etc.).

- Are stormwater management issues currently being addressed regarding new road construction? DOT is required to implement BMPs in conjunction with new construction.

- Stream status is currently assessed by site visits performed by the City or State.

- Assessments of polluted streams with weak biology will rely more heavily upon geomorphology and hydrology to characterize the stream.

- Public concern was expressed that 1 year is a relatively narrow time frame to determine the perennial status of a stream. It was noted that the project must have realistic time constraints and that other factors (e.g. rainfall) will be taken into account. It was agreed that the map will eventually require updating.

- Plants are included in the biological assessment per the DWQ form. However, macrobenthos remain the primary indicators of perennial conditions.

- Individuals may not be legally required to grant field teams access to private property. However, the City has the authority to inspect streams carrying public runoff. There have been very few problems with access and field teams have been instructed to exercise respect for private property.

- The Audobon Society is aware of the project but is not actively participating.

- Project cost is approximately 10K/square mile.

- The City will own the data generated by the project and it will be available to the public. There may be an access fee for those wanting the data.

- Will streams that are altered as a result of construction activities during the course of, or after the project is finished be revisited? This will be decided on a case-by-case basis. If construction is occurring and permits are in place the City will attempt to show the post-construction condition if practicable (time constraints).

- Stormwater Management is not currently involved in the I-73 Project which may traverse watershed critical areas.
- Concern was expressed regarding extensive highway development vs. water quality.
- An example of a stream restoration project is located off of Starmount Dr. (NCDOT)
- There will be an additional informational meeting after the project is completed.
- The maps will be available to the public once the project has been completed and approved by the State.

Meeting minutes prepared by Jay Lawson, LAW Project Environmental Scientist.

JRT/RBD:jl

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